

SPECIFICATIONS

Minimum Continuous Average Power at 14.4 VDC: 30 Watts (for PMA-2030) and 50 Watts (for PMA-2050) per channel, both driven into 4 or 2 ohms

Total Harmonic Distortion at rated power: 0.05%

Frequency Response: 5 Hz to 30 KHz (+0, -0.5dB)

Signal to Noise Ratio: greater than 95dB, A-wtd.

Damping Factor at 100 Hz: 100

Slew Rate: ± 20 volts / microsecond

Low-Level Input: 100 mV to 1V, continuously variable at 10K ohms impedance (RCA Connectors)

High-Level Input: 1 V to 10 V, continuously variable at 100 ohms impedance (Molex connector)

Current Draw at Idle: PMA-2030: 300 mAmps; PMA-2050: 400 mAmps

Maximum Current Draw: PMA-2030: 10 Amps; PMA-2050: 13 Amps

Power Fuse: PMA-2030: 12 Amp AGC fast blow

PMA-2050: 15 Amp AGC fast blow

Dimensions (H x W x D): PMA-2030: (2 1/8" x 7 1/8" x 5 7/8")

PMA-2050: (2 1/8" x 7 1/8" x 7 1/2")

WARRANTY

Limited one-year warranty if installed by ALPHASONIK authorized installers; otherwise, 90 days. Warranty card with terms and conditions enclosed. For warranty terms and service in other countries, consult your ALPHASONIK dealer.

PMA-2030 / 2050 PERMATECT™ PROTECTION FEATURES

Alphasonik amplifiers have two kinds of protection against damage caused by abnormal use. If the amplifier is driven with the speaker wires of either channel shorted or connected to an unsafe load, it will either shut-off or limit its operation to a safe area. It will turn-on again automatically if the problem has been corrected. The amplifier also protects against long-term overloads by shutting down completely if it gets too hot. When it has cooled to a safe temperature, the amplifier will turn on again automatically.

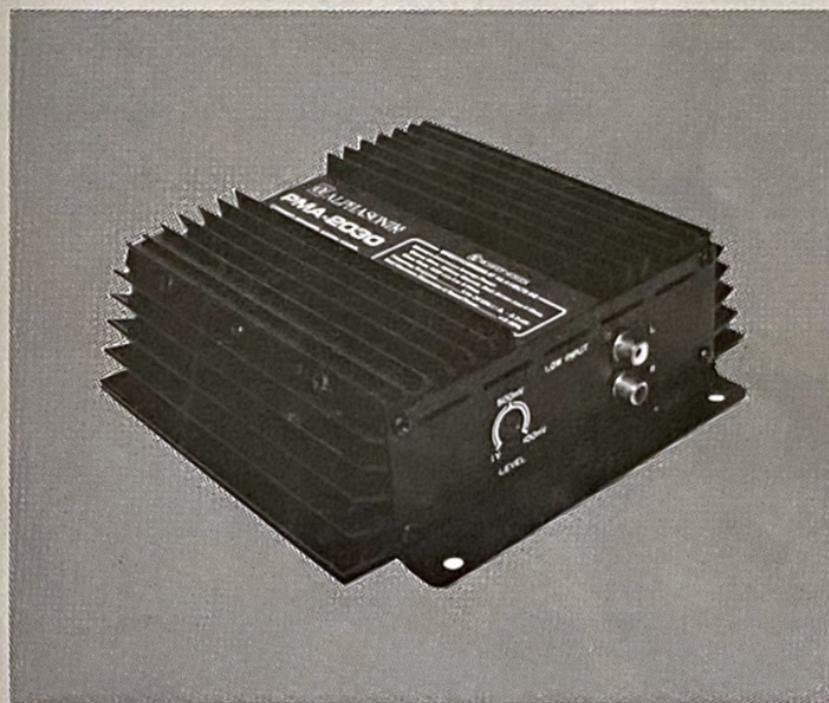
If you get no sound from your amplifier, carefully feel its exterior—if it is uncomfortably hot, the amplifier has shut down. Check your speakers; check to be sure that they are connected as described in this manual. Check the speaker wires for shorts and frayed or pinched insulation. If it continues to shut down from overheating, consult your ALPHASONIK dealer.

ALPHASONIK INC.

701 Heinz Avenue
Berkeley, CA 94710, USA
(415) 548-4005

 **ALPHASONIK®**

PMA-2030/2050 AUTO STEREO POWER AMPLIFIER



INSTRUCTION MANUAL

**Williston
Audio Labs**
Not for Resale

CONGRATULATIONS on your selection of the ALPHASONIK PMA-2030 / 2050 Amplifier. We take pride in manufacturing our products and expect your new amplifier will give you years of trouble-free service.

To make your installation as easy and reliable as possible, **please read this manual carefully** before beginning. If you need more information, your ALPHASONIK Dealer will be glad to help.

- 30 Watts per channel into 4 or 2 ohms (PMA-2030)
- 50 Watts per channel into 4 or 2 ohms (PMA-2050)
- Easily bridged for 60 Watts mono (PMA-2030) and 100 Watts mono (PMA-2050) into 4 or 8 ohms
- Permact™ protection against damage from shorted speaker wires and over heating
- Full Complementary Symmetry, wide bandwidth circuitry with high Slew Rate and low T.I.M.

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WARNING

This product was designed for your listening pleasure at reasonable volume levels. Excessive volume levels may cause permanent hearing damage or loss. Operation of motor vehicle while listening to audio equipment at high volume levels may create unsafe distractions and prevent the operator from hearing sounds, such as horns, warning signals or emergency vehicles, necessary for the safe operation of the vehicle.

STEP 1: MOUNTING THE PMA-2030 / 2050

The ALPHASONIK PMA-2030 / 2050 is easily mounted with the four self-tapping screws included with the amplifier. Remember these points:

- Position the amplifier where it can get adequate air flow for cooling. The heatsink fins should be vertical for proper convection cooling. See Figure 1.
- Mount the amplifier so that it is protected from vibration and use all four mounting screws. Also protect the amplifier from possible water leakage.

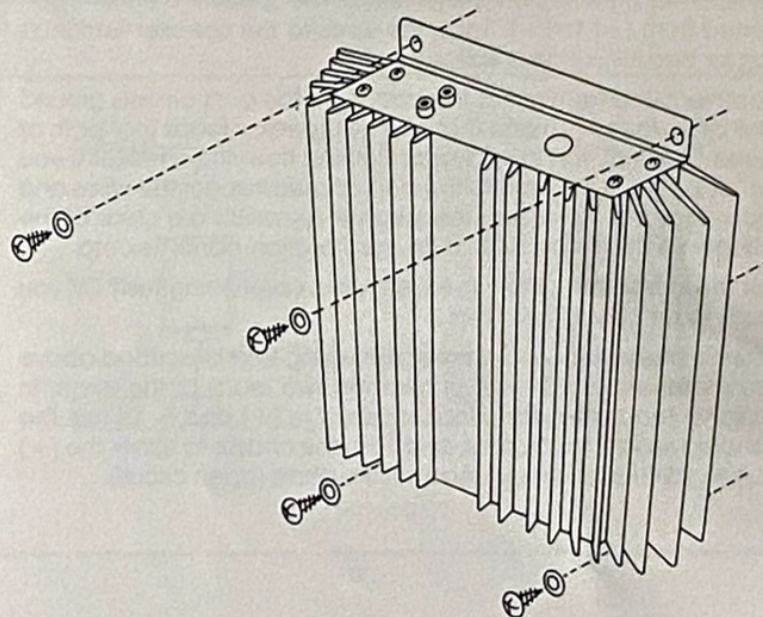


Figure 1

STEP 2: BEFORE CONNECTING THE PMA-2030 / 2050

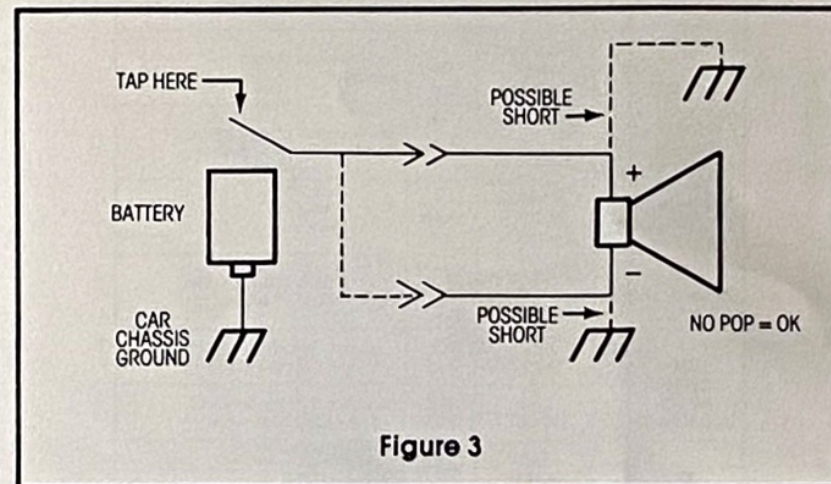
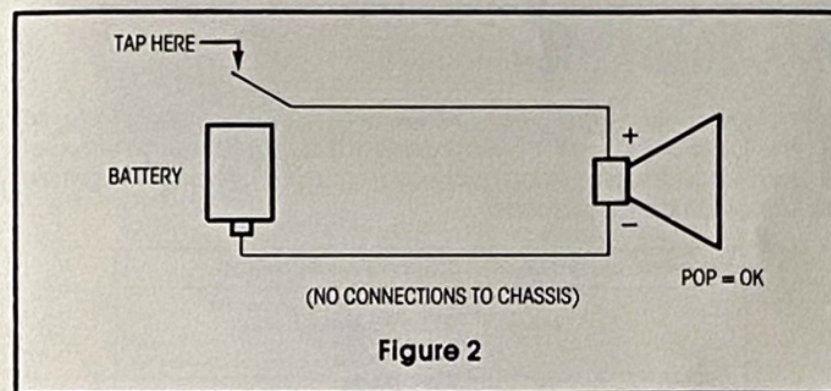
Take a few minutes to check your speakers and their wires to avoid problems and possible damage to your car stereo system. The only equipment that is needed is a flashlight battery (a "C" or "D" cell is fine). If you own a multimeter, see the note at the end of this section.

At the end of the speaker wires which will connect to the amplifier, first connect the positive (+) lead of one channel to the terminal of the battery, and the negative (-) lead to the other terminal (see Figure 2). You should hear a "pop" from the speaker when you connect or disconnect the battery. If not, the wiring or the speaker is either open or shorted from (+) to (-). Trace the wires to the speaker terminals looking for bad insulation or splices.

Next connect one terminal of the battery to the car's chassis ground and the other to the (-) and then the (+) speaker leads (not both at once, see Figure 3). You should hear nothing from the speaker. If you hear a "pop", there is a short to the car's chassis. Inspect the wires and the mounting and make sure the speaker terminals are clear of the mounting hole by at least 1/4" to allow for vibration, panel flex, etc.

Repeat these tests for all the speakers. When everything tests OK you are ready to go ahead with Step 3.

If you own a multimeter, make the same wiring tests described above with the meter set on ohms. Connect the two leads of the meter in place of the two battery terminals, across the (+) and (-) wires. The meter should read 2 to 10 ohms, and from the chassis to either the (+) or (-) wires, the meter should read infinite ohms (open circuit).



STEP 3: CONNECTING THE PMA-2030 / 2050

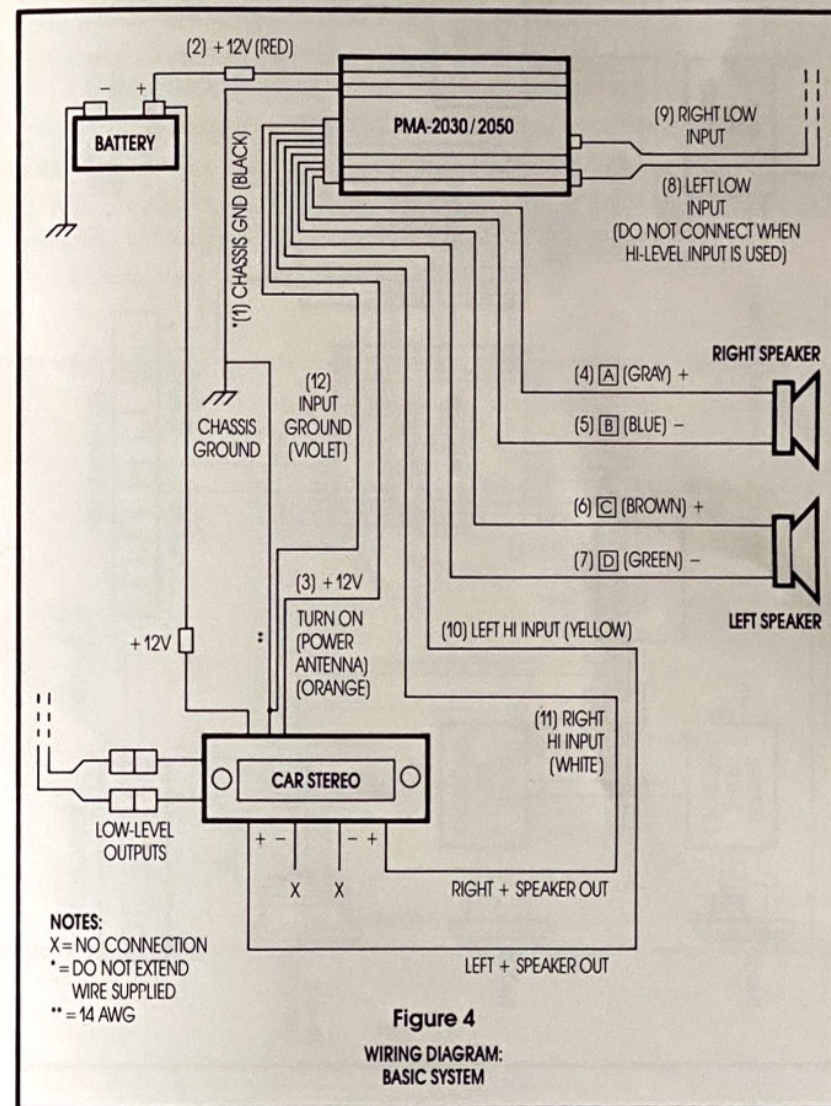
The connections are clearly labeled for easy installation. Refer to the **table** below and the **diagram** that is similar to your system. Get familiar with where each connection goes before beginning, then follow the numbered sequence.

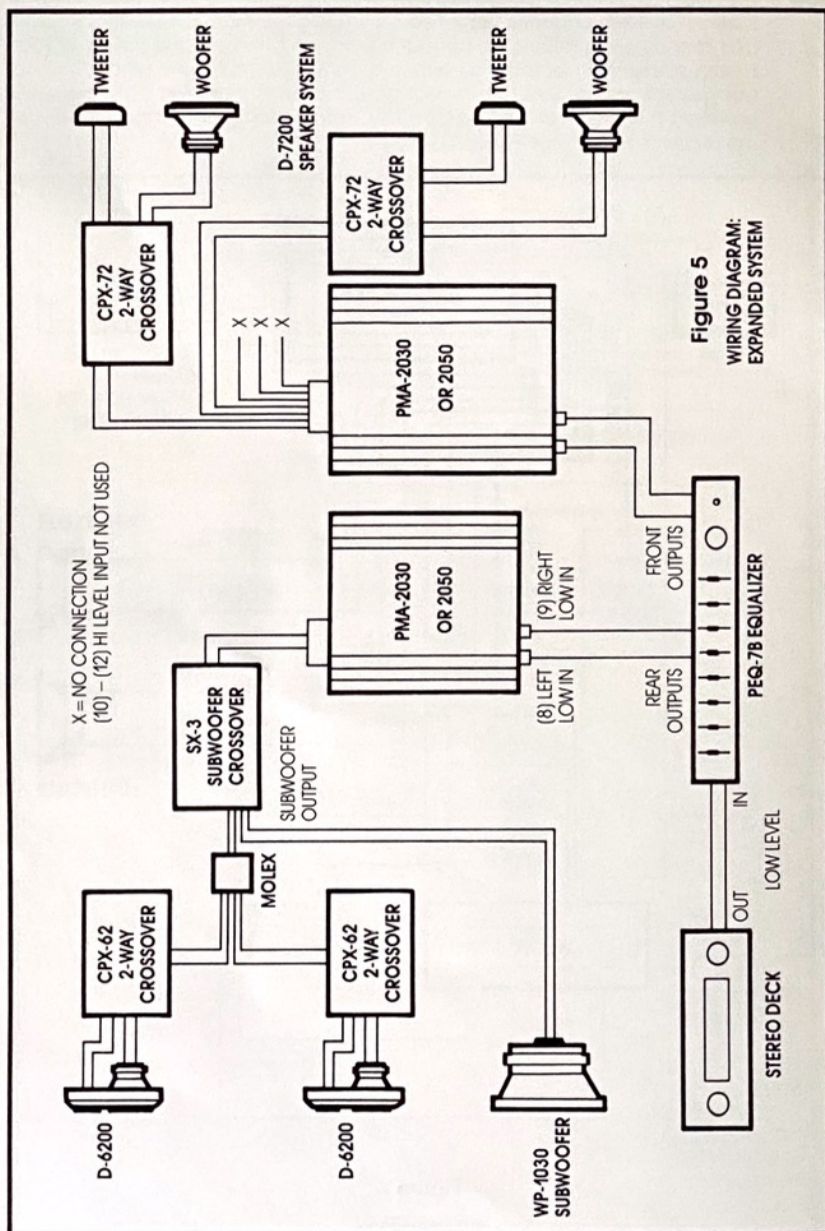
CONNECTION	KEY	CONNECTION LABEL	WIRE COLOR	CONNECTS
POWER	1	Chassis Ground	Black	To chassis ground as near amplifier as possible
	2	+12 Volt DC Power	Red	To battery positive directly—use 12 gauge wire—do NOT connect to fuse block
	3	+12 Volt Turn-On (Power Antenna)	Orange	To "Power Antenna" or "Remote" output of radio
SPEAKER OUTPUTS (on Molex plug) (see Note 3)	4	[A] Connect to Right Speaker +	Gray	To + terminal of right speaker
	5	[B] Connect to Right Speaker -	Blue	To - terminal of right speaker, do NOT connect to ground
	6	[C] Connect to Left Speaker +	Brown	To + terminal of left speaker
	7	[D] Connect to Left Speaker -	Green	To - terminal of left speaker, do NOT connect to ground
LOW-LEVEL INPUTS (see Note 2)	8	Low Input L	RCA Jack	To source left low-level out with shielded coax cable
	9	Low Input R	RCA Jack	To source right low-level out with shielded coax cable
HI-LEVEL INPUTS (on Molex plug) (see Note 2)	10	Left Hi Input	Yellow	To source left + speaker output terminal
	11	Right Hi Input	White	To source right + speaker output terminal
	12	Input Ground	Violet	To car chassis at same point other components are grounded

NOTE 1: If the deck does not have a power antenna lead, connect the orange wire to the +12 volts from the ignition switch, or through a toggle switch. Be sure to turn the switch off when the stereo is not in use.

NOTE 2: If the deck has low-level outputs, or both low-level and speaker level outputs, use the low-level inputs and cut off the yellow, white, and violet wires or insulate their bare ends. If the deck has only speaker outputs, use the high level inputs. NEVER use both low and high level inputs at the same time.

NOTE 3: The minimum recommended speaker impedance for the PMA-2030 / 2050 is 2 ohms for each channel. This is two 4-ohm speaker wired in parallel (plus to plus and minus to minus). Do not put more than two 4-ohm speakers, or four 8-ohm speakers in parallel on either channel. If a multi-way system is used (separate woofers, tweeters, midranges), a proper crossover must be used between the amplifier and each driver. Inductor-capacitor type crossovers are recommended (see Figure 5).

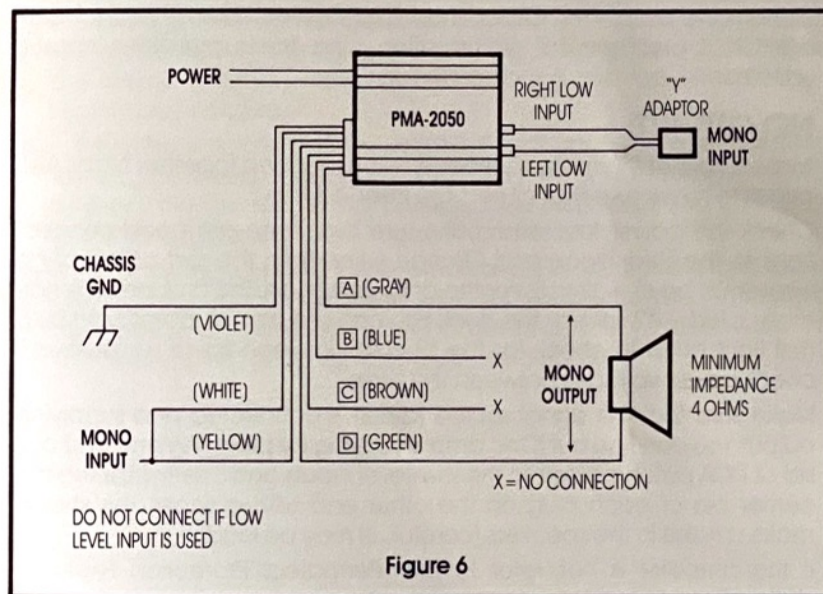




CONNECTING THE PMA-2030 / 2050 FOR MONO BRIDGED OPERATION

Follow the sequence as for stereo operation, except: (refer to Figure 6)

- If you are using the low level inputs, a "Y" adaptor must be used.
- If you are using the high level inputs, the yellow and white wires must be connected together, and the violet wire grounded.
- Connect speaker lead **A** (gray) to the positive speaker terminal.
- Connect speaker lead **D** (green) to the negative speaker terminal.
- Do not connect speaker leads **B** (blue) and **C** (brown). Either cut them off or insulate their bare ends. Do not ground them.
- Minimum speaker impedance is 4 ohms.



STEP 4: ADJUSTING THE INPUT LEVEL

The PMA-2030 / 2050 input sensitivity is adjustable to match the output of any source. The sensitivity control is accessible through a hole in the right side panel of the amplifier, to the left of the low-level input jacks. Set the control to the fully-counterclockwise position, then turn on the radio and set its volume control to approximately 10 o'clock. Adjust the PMA-2030 / 2050 sensitivity to give an average listening level. Do not turn the sensitivity control any further clockwise than necessary—this will increase the level of background noise. **This completes the PMA-2030 / 2050 installation.**

IF YOU HAVE PROBLEMS:

Before removing the amplifier, look for the problem in the list below and follow the suggested procedure. If you have not already made the speaker wiring checks in Step 2, **FIRST disconnect** the speaker wires from the amp, then check them. The list below assumes that they check OK. If problems still persist after using the suggestions, consult your dealer.

1. NO OUTPUT:

- A.** Make sure that the molex connectors are plugged together firmly. Also check to make sure that all pins are inserted fully.
- B.** Check the power fuse and make sure that there are good connections to the Red, Black, and Orange wires. Both the red and orange wires must have +12 volts for the amp to turn on. The orange wire normally is fed +12 volts by the deck. You can use a small 12 volt light bulb (tail light bulb) to check for the 12 volts between these wires. Always check power voltages between the wires.
- C.** Make sure that the signal source (deck) is connected and supplying output. You can find out if the amp is working by plugging one end of a set of RCA patch cords into the low-level inputs and briefly tapping the center pin of each plug on the other end with a finger. This should make a noise in the speakers (careful...it may be loud).
- D.** If the amplifier is hot, refer to the "Permatect Protection Features" descriptions on back cover.

2. ONLY ONE CHANNEL WORKS:

- A.** Make sure that the molex connectors are plugged together firmly. Also check to make sure that all pins are inserted fully.
- B.** If you are using the low-level inputs, reverse the input plugs at the amp—right plug / left input, and left plug / right input. If the channel that is out changes speaker, the problem is in the deck or the connecting cable.
- C.** If you are using the high-level inputs, make the same test as in "B" by reversing the input wires.

3. WEAK OUTPUT IN STEREO MODE:

Check the adjustment of the input sensitivity control as in Step 4.

4. WEAK OUTPUT IN MONO MODE ONLY:

Check that both left and right inputs are connected to mono input as in Figure 6.

5. NOISE IN OUTPUT:

- A.** If noise is a "whine" that goes up and down with the engine speed, make sure that all components are at the same ground potential, and the chassis ground points are free of paint and rust. See grounding techniques in Figure 4.
- B.** If the noise is a "clicking" or "popping" that goes at a rate that follows the engine speed, it is likely coming from the car's ignition system. Make sure that the car has resistor plugs, resistor plug wires, and that all ignition filtering capacitors are in good condition.
- C.** If the noise occurs when signal indicators, brake lights, wiper, etc. are used, make sure that the power wires for all components run straight to the battery, not to the fuse box. Speaker and input wires should not run next to wires that go to lights and other equipment.



We appreciate your interest in Alphasonik products. You should enjoy many years of trouble-free use from the Alphasonik product that you have just purchased.

It is our pleasure to provide the utmost care, design and craftsmanship in the manufacture of this product.

Please retain this card along with the sales receipt for your purchase. This card and proof of purchase should be presented at any authorized Alphasonik repair station if and when your product should need service or repair.

Owner's Record

**PLEASE RETAIN THIS SECTION
FOR YOUR RECORDS!**

Date of Purchase _____

Dealer

Name _____

Address _____

City _____ State _____ Zip _____

Products

Model **PMA-2030** Serial No.

Speakers		
Equalizers		
Amplifiers		
Subwoofer Amplifier		
Subwoofer Driver		
Others		

place
stamp
here

ALPHASONIK, INC.
701 Heinz Avenue
Berkeley, California 94710

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701 Heinz, Berkeley, CA 94710

**Williston
Audio** Exclusively
Not for Resale

ALPHASONIK™

Model	Serial No.
PMA-2030	

Purchaser

Name _____

Address _____

Tel. (____) _____

Date of Purchase _____

Dealer

Purchased from (Dealer): _____

Address _____

Installer

(If different from Dealer)

Name _____

Address _____

We would appreciate the completion of the following questionnaire:

1. Age group: ☐ Under 18, ☐ 18-24, ☐ 25-34, ☐ 35-40, ☐ 40 Plus

2. In what kind of Automobile is it installed? Model _____ Year _____

3. What other car stereo equipment do you have in your car?

	Mfr. Name	Model
Deck		
Speakers		
Equalizers		
Amplifiers		
Subwoofer Amplifier		
Subwoofer Driver		
Others		

4. Other comments: _____

ALPHASONIK™

WARRANTY ALPHASONIK™ PRODUCTS

ALPHASONIK products are designed and manufactured to provide a high level of trouble-free performance when used in accordance with instructions. Prior to packing, this unit was inspected and found to be in acceptable condition and approved for shipment.

TIME PERIOD AND COVERAGE OF THE WARRANTY

ALPHASONIK warrants that the product will, under normal and reasonable use, be free from defects in material and workmanship for a period of one year from the date of purchase, if installed by ALPHASONIK authorized installers; otherwise, 90 days.

Any part which because of manufacturing defects or workmanship fails to function properly during this period and under normal use will be repaired at no charge for parts and labor or, at ALPHASONIK, INC.'s option, the product will be replaced.

WHEN SERVICE IS NEEDED

Package the unit carefully, using ample padding material to prevent damage in transit, and either take it to an authorized ALPHASONIK service center or ship it prepaid and insured to ALPHASONIK, INC., 701 Heinz Avenue, Berkeley, California 94710.

In your package include the following:

1. Sales receipt showing the date and location of installation.
2. A detailed description of the problem.

When service is completed, we will return your unit to you prepaid. If a product is received which is not covered by this warranty, it will be returned to the sender C.O.D. unless the sender has arranged for its non-warranty repair.

THIS WARRANTY DOES NOT COVER:

1. Malfunctions resulting from misuse, accident, or installation.
2. Consequential and incidental damages.
3. Damages from delay or loss of use of equipment.
4. Any units which are modified or tampered with.

Where permitted by law, ALPHASONIK's liability shall be limited to that set forth in this warranty. ALPHASONIK MAKES NO OTHER WARRANTY OF ANY KIND, expressed or implied, and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations and time limits stated in this warranty are hereby disclaimed by ALPHASONIK and excluded from this warranty. Some states do not allow limitation on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above gives you specific legal rights and you may also have other rights which vary from state to state.

THIS WARRANTY IS APPLICABLE ONLY IN U.S.A.

For warranty terms and service in other countries, consult your ALPHASONIK dealer.

Please Return this Card within Ten Days to
Activate Your Warranty!

**Williston
Audio**
Not for Resale

Test Certificate

This unit has been tested individually by an independent inspector and found:

Serial Number: 907AE1344

Minimum continuous average power:

Left channel 31.8 watts
into 4 ohms

Right channel 31.8 watts

Frequency response: 5 to 30 KHz at 14.4 volts DC,
with THD less than 0.05 %

Inspector: D. G. [Signature]